

REMARKS

Claims 1-13 have been examined. Claims 1-13 are all the claims pending in the application. The Examiner has indicated that claims 2, 3 and 5-12 would be allowable if rewritten in independent form. However, Applicants have held in abeyance the rewriting of these claims since the base and/or intervening claims should be allowable for at least the reasons presented below.

Objection to Drawings

The Examiner has objected to Figures 14-16, because allegedly these Figures should be designated by a legend such as Prior Art. Applicants are submitting formal drawings for Figures 14-16 that contain a ^u ~~legend~~ ¹⁾ of Prior Art.

The Examiner has objected to the drawings under 37 C.F.R. § 1.83(a) because the power supply recited in claim 1 and claim 13 is allegedly not illustrated. While Applicants disagree that the power supply is not illustrated in Applicants' drawings, in the interest of expediency, Applicants are submitting a proposed drawing correction to Figure 1, for the Examiner's review and acceptance.

Objection to the Specification

The Examiner has objected to the specification because the proposed amendment to the specification, filed on September 18, 2002, did not include a clean copy of the amendment. Accordingly, this Amendment includes a clean and marked version of the paragraphs of the

specification that Applicants wish to amend. Applicants respectfully request that these amendments be entered.

Rejection of Claim 13 under 35 U.S.C. § 112, first paragraph

The Examiner has rejected claim 13 under 35 U.S.C. § 112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention. In particular, the Examiner alleges that the elastic member that is claimed is not disclosed in the specification.

While the specification does not use the word “elastic member,” page 13, lines 17-18, and page 14, lines 1-2, of Applicants’ specification, disclose spring 59 that applies an elastic force to the brush 80. Also, page 15, lines 8-10, of Applicants’ specification, discloses that the spring is not limited to a spiral spring.

MPEP §2163.02 (8th Edition)(Standard for Determining Compliance with the Written Description Requirement) states that an objective standard for determining compliance with the written description requirement is, “does the description clearly allow persons of ordinary skill in the art to recognize that he or she invented what is claimed.” Further, the subject matter of the claim need not be described literally (i.e. using the same terms) in order for the disclosure to satisfy the description requirement. *Id.*

In view of the above, one skilled in the relevant art could reasonably conclude that Applicants had possession of the claimed invention that includes the elastic member, as recited in claim 13.

For at least these reasons, Applicants respectfully request that the rejection of claim 13 be withdrawn.

Rejection of Claim 1 under 35 U.S.C. § 103(a)

The Examiner has rejected claim 1 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,028,381 (hereinafter Yumiyama) and further in view of U.S. Patent No. 5,659,211 (hereinafter Blanchet) and U.S. Patent No. 5,010,264 (hereinafter Yamada). Applicants respectfully traverse this rejection.

Applicants appreciate the Examiner's attempt to respond to Applicants' arguments with respect to claim 1, however, the Response to Arguments, found on page 6 of the final Office action, dated December 3, 2002, fails to meet the requirements of the MPEP and section 103.

MPEP §707.07(f)(Answer All Material Traversed)(8th Edition) states where Applicants traverse any rejection, the Examiner should answer the substance of Applicants' arguments (emphasis added). In this case, the Response to Arguments is nothing more than quotes of previous case law and fails to adequately address any of the factual inquiries raised by Applicants with respect to Applicants' disclosure and the prior art of record.

The Examiner relies on In re McLaughlin and other case law to support the proposition that a suggestion to combine the applied references, in the manner claimed, existed at the time

the invention was made. However, this method of analysis is founded on legal error because it substitutes supposed per se rules for the particularized inquiry required by section 103. In re Ochiai, 71 F.3d 1565, 1570, 37 U.S.P.Q.2D (BNA) 1127, 1132 (Fed. Cir. 1995)

In In re Ochiai, the Court provided a detailed clarification of what it perceived to be a frequent misunderstanding among examiners.

The use of per se rules, while undoubtedly less laborious than a searching comparison of the claimed invention--including all its limitations--with the teachings of the prior art, flouts section 103 and the fundamental case law applying it. Per se rules that eliminate the need for fact-specific analysis of claims and prior art may be administratively convenient for PTO examiners and the Board. Indeed, they have been sanctioned by the Board, as well. But reliance on per se rules of obviousness is legally incorrect and must cease. Any such administrative convenience is simply inconsistent with section 103, which, according to Graham and its progeny, entitles an applicant to issuance of an otherwise proper patent unless the PTO establishes that the invention as claimed in the application is obvious over cited prior art, based on the specific comparison of that prior art with claim limitations. We once again hold today that our precedents do not establish any per se rules of obviousness, just as those precedents themselves expressly declined to create such rules. Any conflicts as may be perceived to exist derive from an impermissible effort to extract per se rules from decisions that disavow precisely such extraction. (Emphasis added) In re Ochiai, 71 F.3d 1565, 1572, 37 U.S.P.Q.2D (BNA) 1127, 1134 (Fed. Cir. 1995).

The Response to Arguments, on page 6 of the final Office action, dated December 3, 2002, fails to address the arguments raised by Applicants in their Amendment of September 18, 2002. Accordingly, Applicants incorporate by reference herein, Applicants traversal of this rejection, as set forth in the Amendment of September 18, 2002. Applicants also provide the following supplemental remarks.

Blanchet describes that carbon brushes 3 are mounted within the brush carriers 30 and are biased radially inwardly by springs 31. The Examiner alleges that one skilled in the art would

have modified Yumiyama, in view of Blanchet, for the purpose of assembling the components all in the same movement, which enables these components to be fitted quickly. (Page 4 of final Office action). However, the Examiner's reason to modify Yumiyama is incorrect, for at least the following reasons.

One skilled in the art would have recognized that the ability to assemble the brush carrier plate 1 and various electrical components with the body 7, all in the same movement, has nothing to do with the carbon brushes 3 being biased radially by springs 31. Put another way, biasing the carbon brushes 31 radially by springs 31, does not provide the ability to assemble the carrier plate and components to the body, all in the same movement of the elements concerned.

As shown in Figures 3 to 6 of Blanchet, the connecting terminal 4, the brush carrier plate 1 and the thermal protection component 5 are arranged to be positioned on the body 7 in separate emplacements. (Col. 4, lines 1-51). Based on this fact, it is clear that one skilled in the art would not have identified the springs 31 of Blanchet and modified Yumiyama in the manner claimed by Applicants, for the reasons alleged by the Examiner.

The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination. In this case, the Examiner has failed to establish a *prima facie* case of obviousness.

Next, the Examiner alleges that one skilled in the art would have been motivated to modify Yumiyama in view of Yamada because attaching the thermistor to the brush through a terminal increases temperature resistance.

In particular, the Examiner alleges that Yamada discloses in the prior art that the characteristic of the thermistor is that its resistance sharply increases as temperature exceeds a certain level. (Column 1, lines 59-63). While Yamada describes that the positive-coefficient thermistor 26 is held between another internal terminal 22' and an end 24b of another brush arm 24 (column 4, lines 20-22), one skilled in the art would not have been led to include the allegedly corresponding springs of Blanchet.

Indeed, without hindsight knowledge of the invention itself, there is no reason of record why one of ordinary skill in the art would have modified the references in a manner to provide the proposed benefit or to have selected the allegedly corresponding components for combination, in the manner claimed. The Examiner's conclusion of obviousness is based on impermissible hindsight.

For any and all of the reasons above, Yumiya, Blanchet and Yamada, individually or in combination, fail to render obvious claim 1. Accordingly, Applicants respectfully request that the rejection of claim 1 under 35 U.S.C. § 103(a) be withdrawn.

Rejection of Claim 4 under 35 U.S.C. § 103(a)

The Examiner has rejected claim 4 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yumiya, Blanchet and Yamada as applied to claim 1 and further in view of U.S. Patent No. 5,600,193 (hereinafter Matsushima). Applicants respectfully traverse this rejection.

Matsushima fails to compensate for the deficiencies of Yumiyama, Blanchet and Yamada with respect to claim 1. Yumiyama, Blanchet, Yamada and Matsushima, individually or in combination, fail to render obvious the starter of claim 1. Therefore, claim 4 is patentable at least by virtue of its dependency on claim 1.

For reasons analogous to those presented above with respect to claim 1, claim 13 is not rendered obvious.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

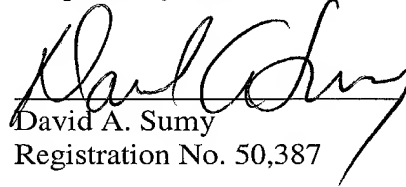
The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

Amendment Under 37 C.F.R. § 1.116
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Respectfully submitted,


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Date: April 3, 2003

APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The specification is changed as follows:

Page 4, third full paragraph:

If current continues to flow in the starting motor 1 after the internal combustion engine starts, heat (hereinafter, referred to as brush heat) is generated in each of the brushes 6 so that the brush 6 have a high temperature. The heat is conducted to the thermostat 12 via the heat reception member 11 so that the temperature of the thermostat 12 rises. When the thermostat 12 reaches a predetermined temperature or higher, the bimetal 18 is bent-distorted to interrupt the energization, and the excitation of the excitation coil 35 becomes null. The movable contact 34 is separated from the fixed contact 33, and the auxiliary switch 32 becomes off. As a result ~~nergization~~energization of the attraction coil 39, the starting motor 1, and the holding coil 40 becomes null. Thus, thermal damages such as dielectric breakdown between the armature 3 and the commutation pieces 4 of the starting motor 1 can be prevented.

Paragraph bridging page 8 and 9:

In the brush device 50, the four brushes 57 contact the commutator pieces 4, due to the pressing forces of the springs 59 (two brushes are omitted in Fig. 1). Currents flow from the

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battery 30 into the armature 3 via the lead wires 58, the ~~brushed~~brushes 57, and the commutator pieces 4, so that the starting motor 1 is rotated.